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EXAMINER

STEVENS, ROBERT

ART UNIT PAPER NUMBER

2162

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/023,857

Applicant(s)

JEANNETTE ET AL.

Examiner

Robert Stevens

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10-14, 19-25, 28, 33-39, 44-49, 51-58, 60-64 and 66-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-14, 19-25, 28, 33-39, 44-49, 51-58, 60-64 and 66-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The Office withdraws the previous rejections of the claims under 35 USC §§101, 112-2<sup>nd</sup> paragraph, in light of the amendment. However, the Office substantially maintains the rejections of the claims under 35 USC §103(a), in light of the amendment.

### ***Response To Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive.

#### Non-art rejections

The Office has withdrawn the previous rejections of the claims under 35 USC §§101 and 112-2<sup>nd</sup> paragraph, in light of the amendment.

#### Art Rejections

Applicant asserts on page 13 of the Amendment that the rejections set forth under 35 USC §103(a) are improper because the Vedula reference does not teach “the creation of a separate data model to read in data and a separate data model to read out data for each of a plurality of transactions”. Applicant asserts that Vedula teaches source and target object schemas.

The Office respectfully disagrees. First the Office notes that schemas are data models. Therefore the providing of source and target schemas is the providing of separate data models for a plurality of transactions. Further, it is noted that the inbound and outbound supermaps of the Schroeder reference implicitly teach the creation of separate inbound and outbound data models.

Applicant further asserts on page 13 of the Amendment that that the Schroeder reference's "generic super data map for a transaction type is not generated from a standard data model (of [emphasis added] the trading partner)", and that the cited references are improperly combined due to a lack motivation.

The Office respectfully disagrees. First, it is noted that the language argued is not that recited in the claim. The claim language recites "by a trading partner", not "of a trading partner". The meaning of these phrases is different. Additionally, it is unclear how Schroeder can properly function without the use of a standard. Schroeder figure 4 shows the creation of a model from inbound data, which is in the sending partner's standard format. The Office further disagrees with applicant's assessment that the incorporation of Vedula's teaching of the presentation of a map that graphically displays a mapping between source and target objects would render Schroeder inoperable. Vedula teaches added functionality that in no way interferes with the translation process taught by Schroeder.

Applicant further asserts on page 13 of the Amendment that these dependent claims are patentable over the cited prior art for the reasons asserted above.

The Office respectfully disagrees. See the Office's counterarguments above.

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Applicant further asserts on page 13 of the Amendment that dependent claim 44 is patentable over the cited prior art because the cited prior art does not teach a manual-entry process.

The Office respectfully disagrees. It is noted that paragraph [0039] of Schroeder teaches that a user can choose the translation format.

Applicant further asserts on page 14 of the Amendment that dependent claims 2-5 are patentable over the cited prior art because the cited prior art does not teach customized data models for read in and read out data.

The Office respectfully disagrees. It is noted that the Schroeder generic data maps contain the information necessary to create a custom mapping. Schroeder teaches translation among trading partner formats, it having been implicit that such a translation process requires a custom mapping from source to target formats.

Applicant further asserts on page 14 of the Amendment that dependent claims 2, 33, 44, 51 and 66 are patentable over the cited prior art because the cited prior art does not teach receiving user input of mapping rules for the standard data model.

The Office respectfully disagrees. It is noted that paragraph [0039] of Schroeder teaches that a user can choose the translation format.

For these reasons, the Office asserts the rejections of the claims as set forth below.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-5, 10-14, 19-25, 27-28, 33-39, 44-49, 51-58, 60-64 and 66-72 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Shroeder et al (US Patent Application Publication No. 2002/0099735, filed Jan. 19, 2001 and published Jul. 25, 2002, hereafter referred to as "Shroeder") in view of Vedula et al (US Patent No. 6,823,495, filed Sep. 14, 2000 and issued Nov. 23, 2004, hereafter referred to as "Vedula").

**Independent claim 1 states:**

*A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents by a trading partner comprising the steps of:*

*receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;*

*generating data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;*

*generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and*

*automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,*

*wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI).

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 2:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051]. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). Shroeder implicitly teaches receiving mapping rules for the standard model in paragraph [0029], it being noted that a library of formats required input of the format rules at some point. It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 3-5** are substantially similar to claim 2, and therefore likewise rejected.

**Regarding dependent claims 10-12:** Shroeder discloses the well-known use of XML in [0069] – [0072], discussing translation to XML. Shroeder further discloses the well-known use of ANSI X12 and UN Edifact in [0092].

**Independent claim 13** is directed to a system for implementing the method of claim 1. As such, claim 13 is substantially similar to claim 1, and therefore similarly rejected.



**Regarding dependent claim 14:** Shroeder does not explicitly disclose the use of a DTD document model. Vedula, though, discloses the well-known use of schemas to model documents in the Abstract, which notes that other information sources may be used to represent source and target documents. It was merely an obvious variant to one skilled in the art at the time of the invention to have employed a DTD model vice a schema model.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Claim 19** is substantially similar to claim 2, and therefore likewise rejected.

**Claims 20-22** are substantially similar to claim 19, and therefore likewise rejected.

**Claims 23-25** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 27** is directed to a computer program product for code configured to cause a computer to perform the method steps of claim 1. As such, claim 27 is substantially similar to claim 1, and therefore similarly rejected.

**Claim 28** is substantially similar to claim 14, and therefore likewise rejected.

**Claim 33** is substantially similar to claim 2, and therefore likewise rejected.

**Claims 34-35** are substantially similar to claim 33, and therefore likewise rejected.

**Claims 36-38** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 39 states:**

*A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents, by a trading partner, comprising the steps of:*

*receiving, by the trading partner, a standard data model containing EDI related data;*

*receiving a manual entry of parameters related to an EDI document format;  
generating from the standard data model and the manual entry of parameters, by the trading partner, data definitions for the self-describing markup language corresponding to each transaction of the EDI related data and the received manually entered parameters; and*

*generating self-describing markup language data using the data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and*

*automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,*

*wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder discloses the selection of EDI formats in [0039] – [0040], disclosing the selection from a list of defined formats by the recipient trading partner and subsequent real-time format translation. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI).

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 44:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051]. (Refer to Applicant's specification at [0079] or PGPUB No. 20030121001 at [0121]). Shroeder implicitly teaches receiving mapping rules for the standard model in paragraph [0029], it being noted that a library of formats required input of the format rules at some point. It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35. It is noted that the use of source and target connotes a directional aspect to the transformation process. Therefore it was implied that the direction of transformation was specified.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the

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Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Claims 45-47** are substantially similar to claim 44, and therefore likewise rejected.

**Regarding dependent claim 48:** Shroeder does not explicitly disclose the use of a DTD document model. Vedula, though, discloses the well-known use of schemas to model documents in the Abstract, which notes that other information sources may be used to represent source and target documents. It was merely an obvious variant to one skilled in the art at the time of the invention to have employed a DTD model vice a schema model.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Independent claim 49 states:**

*A computer implemented method of automatically generating data in a self-describing markup language format from received EDI data, comprising the steps of:*

*receiving EDI data from a component;*  
*retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and*  
*automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition,*  
*prior to said receiving step, generating definitions corresponding to each transaction type from a standard data model of EDI related data,*  
*wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder discloses the selection of EDI formats in [0039] – [0040], disclosing the selection from a list of defined formats by the recipient trading partner and subsequent real-time format translation. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI). Shroeder further discloses the creation of a SuperMap in [0051], which discusses the mapping of EDI purchase order version 4010 segments and elements, wherein the mapping exists prior to the reception of

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incoming data. Shroeder also notes in [0051] that prior art techniques have utilized the creation of individual maps.

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 51:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). Shroeder implicitly teaches receiving mapping rules for the standard model in paragraph [0029], it being

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noted that a library of formats required input of the format rules at some point. It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 52-54** are substantially similar to claim 51, and therefore likewise rejected.

**Claims 55-57** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 58** is directed to a system for implementing the method of claim 49. As such, claim 58 is substantially similar to claim 49, and therefore similarly rejected. It is further noted that the limitation: “*wherein the receiver receives the self-describing markup language data definition generated by a generator*” is also taught by Fig. 1B of Shroeder. See Fig. 1B #26 and #28.



**Regarding dependent claim 60:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 61-63** are substantially similar to claim 60, and therefore likewise rejected.

**Independent claim 64** is directed to a computer program product for code configured to cause a computer to perform the method steps of claim 49 and/or implement the system of claim 58. As such, claim 64 is substantially similar to claim 49 and 58, as appropriate, and therefore similarly rejected.

**Regarding dependent claim 66:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). Shroeder

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implicitly teaches receiving mapping rules for the standard model in paragraph [0029], it being noted that a library of formats required input of the format rules at some point. It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 67-69** are substantially similar to claim 66, and therefore likewise rejected.

**Claims 70-72** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert Stevens  
Examiner  
Art Unit 2162

October 4, 2006



SHAHID ALAM  
PRIMARY EXAMINER